

PE2 Action: Government Operations GHG Inventory







A. Why is this action important?

A greenhouse gas (GHG) emissions inventory is one of the first and most important steps in the local climate action process. A local government operations GHG inventory is an accounting, analysis, and report of the GHG emissions resulting from the day-to-day operations of a village, town, city, or county. It summarizes the GHG emissions from the consumption of energy and materials in government buildings, from wastewater and water treatment facilities, from municipal vehicle fleets, from government-owned outdoor lighting, and from other sources. All Climate Smart Communities should prioritize GHG inventories as a foundational step toward effective action. GHG inventories provide the data needed to set realistic goals and track progress toward reducing operating costs, energy use, and emissions.

GHG inventory reports identify the largest energy users and sources of GHG emissions (e.g., by building, sector, or department). As a result, GHG inventories help local governments select actions that offer a good return on investment and should be highlighted in subsequent climate action planning. Over time, as a local government builds its capacity to conduct GHG inventories on a regular basis, the process helps to increase the ability of the local government to operate efficiently and use taxpayer resources effectively.

B. How to implement this action

For detailed guidance on implementation, download the Climate Smart Communities (CSC) guide New York Community and Regional GHG Inventory Guidance. (Please note that several of the links in this 2014 guide are broken, but the overall framework is still relevant.) The information below provides an overview of the process.

At minimum, the inventory must include the Scope 1 and Scope 2 GHG emissions from government operations for the specific village, town, city, or county that is applying for CSC certification. Examples of the emissions categorized as Scope 1 and Scope 2 are described below.

- Direct GHG emissions (known as Scope 1) for example, from government-owned vehicles, onsite fuel combustion (e.g., natural gas, propane, or fuel oil), wastewater treatment facilities, landfills, refrigerant leakage
- Indirect GHG emissions (known as Scope 2) for example, from purchased electricity

Reporting on Scope 3 emissions is optional for this action, though highly encouraged. Scope 3 emissions are the other indirect GHG emissions not included in Scope 2. These include emissions resulting from the extraction and production of purchased materials and fuels, transportation in vehicles not owned or controlled by the reporting entity, outsourced activities, and waste disposal. A common source of Scope 3 emissions that is often included in government operations inventories is employee commuting. (Note that some voluntary GHG reporting programs require reporting of emissions from specified Scope 3 sources.)

Below is a summary of the steps involved in creating a local government operations GHG inventory:

- 1. Put together a small team who will manage the GHG inventory process and define each member's responsibilities. Identify key contacts who will provide support and data throughout the project. The team should focus not only on producing the GHG inventory report, but also on creating a process and data collection templates that will make producing the inventory easier next time.
- 2. Review options for GHG inventory tools, and select a tool that is appropriate for local goals and resources.

- (Free Excel-based GHG tools are available; contact <u>climatesmart@dec.ny.gov</u> for details.) Confirm that the GHG tool is compliant with the <u>Local Government Operations Protocol (LGOP)</u>, a standardized set of guidelines for quantifying and reporting the GHG emissions associated with local government operations.
- 3. Prepare for the process by determining what will be included in the GHG inventory. Preparation involves selecting a baseline year, assessing which emissions the local government is responsible for, and deciding what government sectors, facilities, and emission sources will be included. The CSC program recommends including only those emission sources over which the local government has operational control. Keep the inventory practical and cost-effective by focusing on the largest sources of emissions; an inventory that covers about 95% of GHG emissions is acceptable and complies with the LGOP. Facility energy use, fleet fuels, and streetlights tend to account for about 90% of local government GHG emissions, for those governments that do not have significant refrigerant leakage and do not operate a landfill or wastewater treatment plant.
- 4. Gather and organize the data. Request data on energy use and other sources of emissions from relevant local government departments and agencies. Review the data for completeness and accuracy.
- 5. Enter the data and calculate GHG emissions using the selected inventory tool. Review the calculations to confirm accuracy. Identify key findings.
- 6. Develop a GHG emissions forecast, where feasible, to estimate how emissions are likely to grow in the near future. Some GHG tools have the capacity to create a simple business-as-usual projection, while other, more sophisticated tools can create a range of forecasts.
- 7. Develop the GHG inventory report, with charts and a narrative description of the results in a way that is accessible and clear.
- 8. Share the report with the community by making a copy publicly accessible.
- 9. Repeat the process every five years, at minimum.

C. Time frame, project costs, and resource needs

Developing a GHG inventory is a data-intensive task that involves costs related to staff time and, where applicable, time for consultants and/or interns. Project coordinators should review the available options for GHG inventory tools and select a tool that is appropriate for local goals and resources. Free GHG tools are available. Contact climatesmart@dec.ny.gov for details.

The total amount of time to produce the inventory depends on several factors, including the size and complexity of the local government, availability and quality of data, amount of resources dedicated to the effort, and promptness of contacts in providing data. The process can take a few months if the data are well organized and readily available. The first inventory process could take as much as a year. When procedures are put in place to enable regular updates of the GHG inventory, the time required will be reduced significantly as data collection improves and staff become familiar with the process.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to all types of local governments. Planning departments or offices that lead climate and/or sustainability efforts are often responsible for managing the creation of GHG inventories. Cross-department involvement is often required to gather all the needed data. Local governments are encouraged to host a kick-off meeting at the beginning of the process and a meeting at the end to discuss the results with local government staff. If the local government chooses to organize a community event to share the report, a public relations officer or communications staff could be involved as well.

E. How to obtain points for this action

A local government operations GHG inventory report that is consistent with the requirements described here is eligible for a total of 16 points.

F. What to submit

Submit a copy of a local government operations GHG inventory report that was published (i.e., released to the public)

within five years prior to the application date. (The baseline year for the GHG data can be from any point in the past.)

As described above (in section B), the inventory must include, , at minimum, the Scope 1 and Scope 2 GHG emissions from government operations for the specific village, town, city, or county that is applying for CSC certification.

The report must include a section describing the methodology and how it complies with established protocols, such as the LGOP. The inventory results can be presented in a report that is a standalone document, or they can be integrated into another report or plan.

Lastly, provide evidence that the report was released to the public; for example, it could be posted on a government website or made available for review at a local library.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

G. Links to additional resources or best practices

- New York Community and Regional GHG Inventory Guidance. (Please note that several of the links in this 2014 guide are broken, but the overall framework is still relevant.)
- <u>US EPA Local GHG Inventory Tools</u>: Download free tools and sign up for updates.
- ICLEI Local Governments for Sustainability USA, Inc.: ICLEI has a comprehensive GHG tool called ClearPath for conducting GHG inventories, forecasts, and monitoring at the community or government operations scale. Membership in ICLEI involves an annual fee based on municipal size and includes access to ClearPath.

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.